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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/664,969

**Applicant(s)**

ABE, KATSUMI

**Examiner**

TAMMY PHAM

**Art Unit**

2629

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) 8-15 and 22-26 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 29, 30 and 33-35 is/are allowed.
- 6) ☒ Claim(s) 16 is/are rejected.
- 7) ☒ Claim(s) 17-21, 31-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/4/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Response to Amendment***

1. Claims 27-28 have been cancelled. Claims 8-15, 22-26 have been withdrawn. Claims 33-35 have been added. Claims 1-26, 29-35 are pending. Claims 1-7, 29-30, 33-35 have been allowed. Claim 16 has been rejected. Claims 17-21, 31-32 have been objected to.

#### ***Response to Arguments***

2. Applicant's arguments filed 20 October 2008 have been fully considered and are found to be persuasive. The final rejection of 17 July 2008 has been withdrawn.

#### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 4 August 2008 was filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Allowable Subject Matter***

4. Claims 1-7, 29-30, 33-35 are allowed.

5. The following is an examiner's statement of reasons for allowance:

6. **Claims 1-7, 29-30, 35** are allowable because prior art fails to teach or suggest, either alone or in combination, for having a common drive circuit with a first and second voltage supply "wherein wherein a high level of a signal passing through the at least one signal line is higher than the high level voltage signal supplied by said first voltage supply and a low level of

*the signal passing through the signal line is lower than the low level voltage signal supplied by said second voltage supply."*

7. **Claim 33** is allowable because prior art fails to teach or suggest, either alone or in combination, for having a common drive circuit with a first and second voltage supply "*wherein wherein a high level of a signal passing through the at least one signal line is higher than the high level voltage signal supplied by said first voltage supply and a low level of the signal passing through the signal line is lower than the low level voltage signal supplied by said second voltage supply.*"

8. **Claim 34** is allowable because prior art fails to teach or suggest, either alone or in combination, for having a common drive circuit with a first and second voltage supply "*wherein wherein a high level of a signal passing through the at least one signal line is higher than the high level voltage signal supplied by said first voltage supply and a low level of the signal passing through the signal line is lower than the low level voltage signal supplied by said second voltage supply.*"

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. **Claims 17-21, 31-22** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akiyama et al. (Japanese Publication No: 11-194316) in view of Hosokawa et al. (US Patent No: 4,393,380).
12. **As for independent claim 16**, Akiyama teaches of a display (Drawing 2, item 10) comprising:
  13. a substrate (not shown);
  14. a display portion (Drawing 2, item 10) integrated on the substrate (not shown); and
  15. a gate driver circuit (Drawing 2, item 14) which controls switching of pixels of each line in a display portion (Drawing 2, item 10);
  16. a common drive circuit (Drawing 6) for the display portion (Drawing 2, item 10) which simultaneously driving capacitance loads in the display portion (Drawing 2, item 10).
17. Akiyama fails to teach that the common drive circuit is disposed on a position opposite to the gate driver circuit and the display portion therebetween.

18. Hosokawa teaches that the common drive circuit (Fig. 4, item 34) is disposed on a position opposite to the gate driver circuit (Fig. 4, item 2) and the display portion (Fig. 4, items 5, 6, 30, 31) therebetween.

19. All of the component parts are known in Akiyama and Hosokawa. The only difference is the combination of the "old elements" so that the display is between the gate driver circuit and the common drive circuit. Thus, it would have been obvious to one having ordinary skill in the art to have the common drive circuit be positioned opposite to the gate driver circuit with the display portion in between as taught by Hosokawa with the common drive circuit of Akiyama, since the repositioning of these elements is in no way critically dependent upon the overall operation of the display, and further this configuration could be combined to achieve the predictable result of space and cost efficiency when a display is located in a compact area.

*Conclusion*

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).
21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP  
7 November 2008

*Tammy Pham*  
/Tammy Pham/  
Examiner, Art Unit 2629

/Sumati Lefkowitz/  
Supervisory Patent Examiner, Art Unit 2629